



## PATENT ABSTRACTS OF JAPAN

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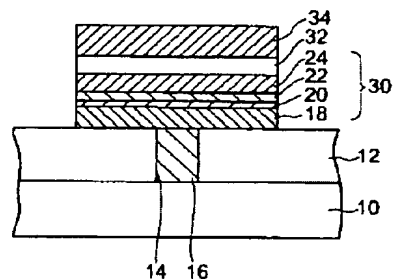
(54) **CAPACITIVE ELEMENT AND METHOD FOR  
 MANUFACTURING THE SAME**

## (57) Abstract:

**PROBLEM TO BE SOLVED:** To provide a capacitive element having a ferroelectric film capable of preventing oxidation of a plug in a process for crystallizing a capacitor dielectric film in a stacked capacitive element, and preventing diffusion of iridium to the capacitor dielectric film.

**SOLUTION:** This capacitive element is provided with a lower electrode 30 constituted by successively forming first conductive films 18 and 20 including first metal, a second conductive film 22 formed on the first conductive films 18 and 20, and made of metallic oxide including second metal different from the first metal, and a third conductive film 24 formed on the second conductive film 22, and made of third metal different from the first metal.

本発明の第1実施形態による容量素子の構造を示す縦断面図



- |             |              |
|-------------|--------------|
| 10 シリコン基板   | 22 酸化プラチナ膜   |
| 12 層間絶縁膜    | 24 プラチナ膜     |
| 14 コンタクトホール | 30 下部電極      |
| 16 プラグ      | 32 キャパシタ誘電体膜 |
| 18 イリジウム膜   | 34 上部電極      |
| 20 酸化イリジウム膜 |              |